

MORBIDITY AND MORTALITY WEEKLY REPORT

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Surveillance of Mortality During a Refugee Crisis — Guinea, January–May 2001

Since 1990, the republic of Guinea (2000 population: 7.5 million) has accepted 390,000–450,000 refugees from Sierra Leone and Liberia (1,2). During this 10-year period, refugees have lived in small villages scattered throughout rural southeastern Guinea (3). During September–December 2000, attacks by armed factions in Guinea led to the widespread displacement of refugees living in the southeastern camps; the refugees subsequently were transferred to safer camps in the northwest. Approximately 280,000 refugees initially were estimated to have been displaced (4). After the attacks, the number of refugees relocated was approximately 58,000. This report demonstrates methods used to calculate mortality rates when large populations are displaced. The findings indicate that the number of refugees in Guinea before the relocation probably was overestimated. The mortality rates calculated using conservative denominator numbers did not meet the definition of an emergency phase* of a complex emergency¹, and mortality rates were lower for refugees compared with baseline rates for the local population. Accurate methods are needed to estimate population size in complex emergencies to provide resources to vulnerable groups.

In camps that were accessible to site visits by international agencies, nongovernmental organizations (NGOs)⁵ collected and reported camp mortality data from NGOs and government health posts, camp health-care workers, the referral hospital, and burial workers. Deaths were line listed (i.e., one line for each death), and duplications of reported deaths were deleted. Estimates of camp populations were provided by the government of Guinea, the United Nations High Commissioner for Refugees (UNHCR), NGOs, and refugee and other organizations. Because these estimates varied widely, the lowest estimates for all camps were used to calculate mortality rates. Nutrition surveys could not be conducted in less accessible camps; the prevalence of acute malnutrition among children aged 6–49 months was estimated using nutrition screening data collected from all children entering new camps in northwestern Guinea. Monthly camp

^{*}Crude mortality rate of ≥1 death per 10,000 population per day or a mortality rate of ≥2-4 deaths per 10,000 children aged <5 years per day.

Relatively acute situations affecting large civilian populations, usually involving a combination of war or civil strife, food shortages, and population displacement, resulting in excess mortality.

⁴ Action Against Hunger, American Refugee Committee, International Federation of the Red Cross and Crescent, Doctors of the World, and Doctors Without Borders.

Refugee Crisis - Continued

death rates usually are calculated by dividing the sum of all deaths in the camps by the sum of each camp's midpoint population size and then dividing by the number of days in the month or by the mean number of days the camps were open. However, using this approach would have underrepresented camps that were not open for the entire month.

Individual camp mortality rates were calculated based on the number of days each camp was open during the month. Several sites were transit camps; opening and closing of these camps depended on refugee migration patterns. The mean mortality rates weighted by population were used to calculate overall camp mortality rates by month; mortality rates of each camp were weighted using the overall population and totaled. Only camps reporting data for the entire time they were open during each month were included in the overall monthly mortality rates. The same weighting method was used to calculate the overall crude mortality rate (CMR) and the mortality rate for children aged <5 years (<5MR) during January–May 2001.

The number of camps included in the health information systems (HIS) during January–May 2001 varied from four to 15 camps sheltering approximately 34,000–89,500 persons because of large population movements and changing security conditions. Before relocation, an estimated 280,000 refugees were housed in approximately 43 camps. However, in three HIS camps, census or relocation numbers determined by UNHCR were 1.6–3.9 times higher than original estimates of 280,000. If the overestimation ratios of 1.6–3.9 are applied to the original population estimate, the actual refugee population in southeastern Guinea may have ranged from 72,000 to 175,000 persons. Camps represented in the HIS tended to be larger and more accessible to UN and NGO health workers. All children aged 6 months–15 years were vaccinated for measles on entry to the new camps*.

During January–May 2001, a total of 304 deaths were reported; 173 (57%) were among children aged <5 years. The CMR and <5MR of 0.3 and 0.9 deaths per 10,000 per day, respectively, were well below the levels used to define the emergency phase of a complex emergency (5,6). These rates also were lower than the CMR and <5MR reported for the Guinean population (0.5 and 1.3 deaths per 10,000 per day, respectively) (7). The CMR and <5MR monthly trends were higher at the beginning of relocation in January and after most refugees had been transferred in May. Mortality rates decreased then stabilized from February to April as refugees who arrived in secure camps were provided with services. In May, however, mortality rates increased (Figure 1) (5). NGOs anecdotally reported an increase in malnutrition in some of the less accessible camps. However, of 4,771 children who were screened in the new camps using weight-forheight during February–May, 119 (2.5%) were acutely malnourished.

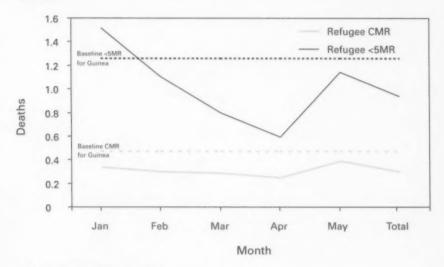
In response to the increase in mortality rates among refugees in Guinea during May, UN agencies and NGOs 1) accelerated efforts to move the refugees in the new camps from crowded temporary shelters to permanent family structures, 2) enhanced communicable disease surveillance, 3) improved water and sanitation provisions in the new camps, 4) stockpiled cholera-control supplies, and 5) increased the number of health posts.

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¹Provided by United Nations Children's Fund and the government of Guinea.

Refugee Crisis - Continued

FIGURE 1. Reported crude mortality rate* (CMR) and mortality rate among children aged <5 years (<5MR)¹ among refugees in Guinea compared with respective baseline rates among the resident population, by month and refugee group — Guinea, January—May 2001



* Per 10,000 population per day.

1 Per 10,000 children aged <5 years per day.

Editorial Note: During complex emergencies, agencies must resolve immediate health questions affecting tens of thousands of refugees, despite the uncertainty of population size and the inaccuracy of data. This report used methods to calculate rates that suggest an effective response to the 2001 Guinea refugee crisis in which large populations were displaced. Mortality rates might have been kept below emergency threshold rates because of the prompt engagement of international agencies together with sufficient resources and coping mechanisms developed by the refugees during the 10 years in Guinea preceding the latest crisis. The increase in mortality after most refugees were relocated into the new camps might have occurred because some refugees were not relocated to individual family shelters as quickly as planned, causing overcrowding of temporary shelters and overburdening of existing facilities. This increase demonstrates the need to ensure that adequate human and material resources and programs are in place before large transfers of persons occur.

Lower mortality rates among refugees than among host populations have been documented in postemergency settings (8,9); in Guinea during the displacement, the refugee population had lower mortality rates than those of the baseline population in Guinea. The lack of mortality data for the local and internally displaced populations during the refugee crisis suggests that organizations whose mandates cover nonrefugee populations need to be included early in the process of emergency response.

Refugee Crisis - Continued

Despite all refugees being offered transportation, far fewer relocated to the new camps than had been anticipated. Populations commonly are overestimated in refugee crises because food distribution is linked to camp size. In Guinea, internally displaced and local persons sought to be counted as refugees to receive food aid and other services; distinguishing among the three groups, where refugees came from the same ethnic group and lived among the local population, was particularly difficult.

The findings in this report are subject to at least five limitations. First, data were unavailable from inaccessible camps where mortality rates may have been higher than in more accessible camps. Second, population denominators for camps that did not have a recent census probably overestimated population sizes. Third, underreporting and underestimates of mortality might have occurred in camps with limited access. Fourth, only camps with data for 1 month were included in the monthly HIS calculations. The changing number of camps with data available for an entire month and the opening and closing of some transit camps make the comparison of monthly rates difficult, because the same sites and populations were not represented each month. Finally, midpoint rather than the mean population size was used as the denominator in calculating mortality rates. The preferred method is unclear because of the constant changes in population throughout this period (10).

Difficulties arise when estimating mortality and nutrition rates among displaced populations that are moving at different rates in areas with varying accessibility (10). In Guinea, some approaches to these challenges were 1) including mortality data only for the days in which individual camps were open for each month throughout the 5-month reporting period, 2) using the lowest population estimates and applying them retrospectively when appropriate, and 3) calculating overall mortality rates using population-weighted mean rates to allow for an unbiased estimate from camps being open for different numbers of days within a month.

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Imported Wild Poliovirus Causing Poliomyelitis — Bulgaria, 2001

In March 2001, a 13-month-old unvaccinated Roma (i.e., gypsy) girl from Bourgas, Bulgaria, had onset of bilateral leg weakness. The National Enterovirus Laboratory in the capital city of Sofia subsequently isolated a wild type 1 poliovirus in the patient's stool. In April, a second case, with wild type 1 poliovirus isolate was found in lambol located approximately 50 miles west of Bourgas in an unvaccinated 26-month-old Roma girl who had onset of paralysis of both legs. Subsequent analyses indicated that these viruses were related closely to a strain isolated from Uttar Pradesh, India, in July 2000. A third confirmed case with clinical and serologic evidence of poliomyelitis was diagnosed in a 3-month-old Roma boy in Bourgas who had onset of paralysis on May 7. Following the identification of the poliovirus, the Bulgarian Ministry of Health implemented contact investigations, screening of children at high risk, retrospective record review, intensified acute flaccid paralysis (AFP) surveillance, and mass vaccinations. This report summarizes the outbreak investigation and supplemental vaccination activities in response to these polio cases. High routine vaccination coverage and certification standard AFP surveillance are necessary to detect rapidly and prevent the spread of poliovirus importations in areas and countries where polio is not endemic.

During 1998–2000, AFP surveillance in Bulgaria had detected 0.9 nonpolio cases per 100,000 persons aged <15 years per year (adequate surveillance is indicated by a nonpolio AFP case detection of ≥1 per 100,000 persons aged <15 years). In addition, 79% of AFP cases were investigated with adequate stool specimens* (adequate performance is indicated by an adequate specimen collection rate of at least 80%). During January–March 2001, two AFP cases were detected in Bulgaria. Following identification of case 1, the number of AFP cases identified increased rapidly. As of November 1, a total of 33 cases had been identified, including 30 nonpolio cases, corresponding to a nonpolio AFP detection rate of 2.6 per 100,000 persons aged <15 years. The proportion of cases with adequate specimens was 94%.

During April–May 2001, serosurveys were conducted among high-risk children (i.e., children from minority communities or residing close to areas with large minority populations) aged 0–83 months. Among 26 Roma children hospitalized in Bourgas, 12 (46%) lacked detectable antibodies (Table 1). High-risk children from Sofia were more likely to lack antibodies to all three types of polioviruses (nine of 12 children) than children residing in Dobrich, Pazardjik, and Plovdiv (six of 33 children). Stool specimens also were obtained from children at high risk for exposure. Wild type 1 poliovirus was found in an 11-month-old girl in Karnobat whose sister had shared the hospital ward with case 1, and in a 15-month-old girl in Sofia. These children had no symptoms compatible with polio.

To control the outbreak, a mass vaccination campaign of high-risk children was initiated on April 19 in the area of residence of case 1 and was expanded to the entire Bourgas district and the three neighboring districts of lambol, Sliven, and Stara Zagora on April 27. During May 28–June 1 and June 25–29, 2001, a national campaign composed of two rounds with a goal of vaccinating all 468,720 children aged 0–6 years was

^{*}Two stool specimens collected at least 24 hours apart within 14 days of onset of paralysis and shipped adequately to the laboratory.

Imported Wild Poliovirus - Continued

TABLE 1. Distribution of antibodies to poliovirus serotypes 1, 2, and 3 among hospitalized Roma children, by age — Bourgas, Bulgaria, 2001

			-	
Age group (mos)	No. with antibodies to all three serotypes	No. with antibody to serotype one	No. with no antibodies	Total
0- 2	0	1	6	7
3- 5	1	0	2	3
6-23	7	2	2	11
24-35	1	0	0	1
36-83	1	1	2	4
Total	10	4	12	26

conducted. Administrative¹ coverage estimates suggested that 94% of all children in the country were vaccinated during the first round and 95% during the second. Because the initial contact investigations revealed that up to half of the children from high-risk groups were not vaccinated fully by the routine program, one additional round of mass vaccination was conducted during October for high-risk children aged 0–4 years; another round is scheduled for November.

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Editorial Note: This report describes the transmission for several months of a wild poliovirus imported into a country that had been free of polio for approximately 10 years. This outbreak of polio occurred because poliovirus was introduced into population subgroups with low immunity. The last indigenous wild poliovirus in the 51-country European Region (EUR) of the World Health Organization (WHO) occurred in November 1998 in Turkey (1). The last outbreak of polio in Bulgaria occurred in 1991 and involved 46 confirmed cases from the Roma community (2).

Suboptimal immunity in the Roma population contributed to the 1991 and 2001 outbreaks. Population subgroups with lower vaccination coverage can sustain the circulation of wild polioviruses for several years within a country (3–5). High-risk communities are present in all European countries. As polio is eliminated, areas or population groups with lower immunity remain vulnerable to importation of wild poliovirus and subsequent transmission (6,7).

When wild poliovirus type 1 was confirmed in this outbreak, WHO immediately informed authorities in all EUR member states and asked them to enhance AFP surveillance and rapidly enhance vaccination coverage in hard-to-reach minority population subgroups. WHO conducted training and consultation to improve surveillance and vaccination in several countries neighboring Bulgaria.

[†]Vaccination coverage determined by the administrative method (in which the doses administered is the numerator and the estimated number of children to be vaccinated is the denominator) is often higher than coverage determined through surveys because of overestimates in the number of doses of vaccine administered and underestimates of the size of the population that should receive vaccination.

Imported Wild Poliovirus - Continued

Bulgarian authorities promptly implemented National Immunization Days¹ within 64 days of paralysis onset in case 1. High coverage reported for the campaign countrywide, improved performance of AFP surveillance, and the absence of wild polioviruses in subsequent stool surveys of high-risk children suggest that circulation of the wild virus has been interrupted. The investigations and interventions by the Bulgarian Ministry of Health exemplify an effective response to possible importation of poliovirus that is particularly useful as EUR prepares to certify eradication of polio. Until polio is eradicated, the risk for importation will persist in countries and areas free of polio.

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Notice to Readers

Unexplained Deaths Following Knee Surgery — Minnesota, November 2001

The Minnesota Department of Health (MDOH) has received reports of three previously healthy persons who died unexpectedly following uncomplicated knee surgery; two had total knee replacements and one had a cartilage graft implantation. The surgeries were performed at two local hospitals. Two patients died on November 11, 2001, and one died on November 16, approximately 36–82 hours following surgery. CDC is assisting MDOH in the investigation of these events.

All three patients became ill 1–4 days following surgery. Symptoms included severe abdominal pain and a sudden decline in blood pressure followed by a fulminant course with death within 24 hours of symptom onset. The clinical course was consistent with septic or cardiogenic shock. After 5 days of incubation, a blood culture taken from one of the patients yielded *Clostridium sordellii*. The source of infection 'n the one patient and the cause of death in all patients remain unknown.

In response to these deaths, MDOH is recommending that all elective knee surgery in Minnesota be suspended pending findings of the investigation. To identify possible cases in other areas, CDC is seeking reports of patients who have had orthopedic surgery since

Mass campaigns over a period of days to weeks in which two doses of oral poliovirus vaccine are administered to all children usually aged <5 years regardless of previous vaccination history with an interval of 4–6 weeks between doses.

Notices to Readers - Continued

October 1, 2001, involving the knee or other large joint, and within 7 days following surgery who have 1) had hypotension and other clinical findings of cardiogenic or septic shock or abdominal pain; 2) had no other identified cause; and 3) required intensive care or have died. Clinicians should report such patients to their state health department or CDC's Division of Healthcare Quality Promotion, telephone 800-893-0485.

Notice to Readers

Weekly Update: West Nile Virus Activity — United States, November 14–20, 2001

West Nile virus (WNV) surveillance data for the week of November 14–20 will be published in next week's MMWR.

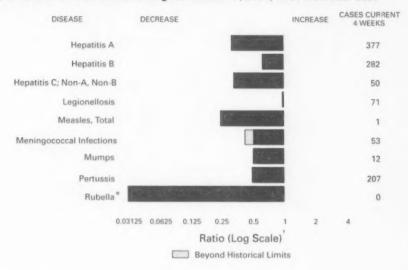
Erratum: Vol. 50, No. 45

In the Notice to Readers "Reducing the Risk for Injury While Traveling for Thanksgiving Holiday," the first line of the fourth paragraph should read "Place all children aged ≤12 years in the back seat." The second sentence of the fifth paragraph should read "More than 16,000 (40%) traffic deaths each year are associated with alcohol use."

Erratum: Vol. 50, No. SS-4

In the surveillance summary "Youth Tobacco Surveillance — United States, 2000," on page 49, Table 4, under the column titled "Any tobacco*," the total for middle school students should read 15.1 (+1.5).

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending November 17, 2001, with historical data



No rubella cases were reported for the current 4-week period yielding a ratio for week 46 of

Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending November 17, 2001 (46th Week)*

		Cum. 2001		Cum. 2001
Anthrax		13	Poliomyelitis, paralytic	
Brucellosis'		75	Psittacosis'	22
Cholera		3	O fever¹	20
Cyclosporiasis	s†	127	Rabies, human	1
Diphtheria		2	Rocky Mountain spotted fever (RMSF)	537
Ehrlichiosis:	human granulocytic (HGE)1	186	Rubella, congenital syndrome	
	human monocytic (HME)'	79	Streptococcal disease, invasive, group A	3,162
Encephalitis:	California serogroup viral1	99	Streptococcal toxic-shock syndrome1	42
	eastern equine	8	Syphilis, congenital ⁴	190
	St. Louis'	1	Tetanus	22
	western equine'		Toxic-shock syndrome	103
Hansen diseas	se (leprosy)1	73	Trichinosis	21
	Ilmonary syndrome [†]	6	Tularemia*	93
Hemolytic ure	emic syndrome, postdiarrheal!	134	Typhoid fever	241
HIV infection,		181	Yellow fever	
Plaque		2		

: No reported cases.

*Not reported cases.
**Mort notifiable in all states.
**Not notifiable in all states.
**Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV,

STD, and TB Prevention (NCHSTP). Last updated October 30, 2001. *Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 17, 2001, and November 18, 2000 (46th Week)*

									coli 0157:H7	
	All		Chlan			poridiosis	NE1		-	LIS
Reporting Area	Cum. 2001 ¹	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum, 2000
UNITED STATES	33,013	32,692	622,555	615,338	2,973	2,754	2,726	4,147	2,053	3,416
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	1,276 40 31 13 661 85 446	1,673 28 28 29 1,049 81 458	20,498 1,187 1,166 542 8,730 2,602 6,271	20,828 1,304 980 476 8,933 2,372 6,763	114 18 15 31 46 4	129 20 22 26 34 3 24	214 26 33 13 113 14 15	358 31 36 33 158 19 82	211 26 27 8 107 11 32	365 28 38 34 164 18 83
MID. ATLANTIC Jpstate N.Y. V.Y. City V.J.	7,683 823 3,788 1,537 1,535	7,090 665 3,755 1,423 1,247	66,940 12,657 26,225 9,798 18,260	58,010 2,672 23,286 9,403 22,649	242 96 84 10 52	348 115 156 17 60	193 150 12 31 N	409 274 22 113 N	180 136 10 34	325 67 18 113 127
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	2,513 482 306 1,115 459 151	3,164 475 320 1,596 601 172	103,743 21,662 13,217 29,501 26,784 12,579	105,665 27,359 11,890 29,663 22,252 14,501	1,366 153 77 399 166 571	911 250 57 114 90 400	719 198 79 152 86 204	1,013 247 118 186 136 326	473 146 39 128 73 87	712 214 83 155 104 156
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	719 121 78 347 2 23 63 85	762 153 73 349 2 7 64 114	31,159 6,361 3,944 11,275 767 1,571 2,175 5,066	34,856 7,250 4,638 11,881 774 1,626 3,287 5,400	407 170 78 41 13 6 96 3	344 123 74 29 15 15 79	508 242 79 57 18 41 52	599 161 173 106 18 54 60 27	410 186 60 81 31 41	574 189 147 96 21 58 46 17
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fia.	10,366 218 1,529 738 803 73 807 623 1,239 4,336	9,072 182 1,127 694 580 54 585 682 1,049 4,119	119,206 2,309 10,712 2,642 16,192 2,082 18,039 9,717 26,228 31,285	115,757 2,551 12,457 2,834 13,893 1,897 19,481 8,583 24,632 29,429	308 6 36 10 24 2 27 7 127 69	430 6 9 14 18 3 25 161 194	209 4 23 48 10 46 16 30 32	346 3 32 1 67 14 87 21 38 83	129 7 1 U 39 8 33 11 15	274 1 2 U 62 13 67 16 37 76
E.S. CENTRAL Ky. Tenn. Ala. Miss.	1,554 299 507 378 370	1,618 168 684 418 348	42,865 7,615 12,770 12,401 10,079	45,186 7,082 13,112 13,786 11,206	45 4 13 16 12	46 5 11 15 16	118 57 37 16 8	138 39 53 10 36	99 47 39 6 7	111 32 51 9
W.S. CENTRAL Ark. La. Okla. Tex.	3,488 178 711 203 2,396	3,366 158 587 294 2,327	92,626 6,118 15,402 9,205 61,901	93,119 5,839 16,177 8,360 62,743	34 7 7 13 7	165 14 12 17 112	88 13 4 29 42	221 56 15 19 131	91 26 28 37	273 38 47 17 171
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	1,172 15 19 3 248 129 459 101 198	1,211 12 19 9 294 126 386 113 252	34,694 1,584 1,698 736 7,156 5,202 12,659 1,512 4,147	33,931 1,221 1,665 708 8,941 4,534 11,309 2,063 3,490	219 36 21 7 36 27 7 81 5	166 10 23 5 69 19 10 26 4	265 20 64 6 88 14 28 30	402 30 69 19 152 22 47 49	128 1 52 10 22 42	40 11 108 18 41 70 10
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	4,242 435 177 3,552 18 60	4,736 428 145 4,042 22 99	110,824 12,013 6,463 86,648 2,284 3,416	107,986 11,548 5,958 85,077 2,235 3,168	48 186 1 3	225 U 18 207	412 116 64 211 4 17	661 218 129 270 30 14	332 62 58 203 1 8	484 200 112 155 6
Guam P.R. V.I. Amer. Samoa C.N.M.I.	1,021 2 1	13 1,133 31	2,193 53 U 117	442 U	Ü	0	N 1	N 6	00000	0000

N: Not notifiable. U: Unavailable. : No reported cases. C.N.M.L: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

* Chlamydia refers to genital infections caused by C. trachomatis.

* Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and

TB Prevention. Last updated October 30, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending November 17, 2001, and November 18, 2000 (46th Week)*

	Gonorr	hea	Hepatiti Non-A, N	is C; lon-B	Legione	llosis	Listeriosis	Ly	me ease
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000
INITED STATES	287,475	315,461	2,876	2,817	915	981	416	11,191	15,328
NEW ENGLAND Maine N.H. /t. Mass. R.I. Conn.	5,903 119 163 61 2,756 754 2,050	5,851 81 96 60 2,445 578 2,591	15 7 8	29 2 4 18 5	70 9 10 5 22 10	53 2 3 5 17 9	39 2 4 3 24 1 5	3,631 136 15 826 449 2,205	4,933 60 39 1,128 550 3,156
MID. ATLANTIC Jpstate N.Y. V.Y. City V.J.	34,282 7,594 11,078 6,831 8,779	34,650 6,580 10,203 6,403 11,464	1,439 52 1,338 49	624 35 547 42	174 61 23 8	274 84 45 21 124	62 26 11 10 15	5,540 3,219 2 927 1,392	7,985 3,450 176 2,395 1,964
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	54,242 12,096 5,856 16,306 15,392 4,592	63,086 16,929 5,615 18,643 15,684 6,215	149 5 1 13 130	209 12 19 178	273 122 22 19 74 36	252 105 34 29 47 37	62 14 8 11 22 7	633 110 23 21 13 466	761 58 22 35 23 623
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak.	13,350 2,065 1,016 7,047 34 248	15,903 2,823 1,114 7,847 62 259	647 9 625	539 5 2 521	48 9 8 21 1 3	55 7 13 25	17	356 292 35 24	365 267 31 45
Nebr. Kans.	710 2,230	1,334 2,464	4 9	4 7	5	4	1 4	3 2	4 17
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fia.	73,547 1,398 6,020 2,417 9,505 621 14,714 6,483 14,463 17,926	82,125 1,537 8,610 2,341 9,286 574 15,998 7,535 16,091 20,153	97 16 - 9 19 6 1	97 2 12 3 3 14 17 3 3	180 12 34 8 20 N 10 13 10 73	178 10 65 5 31 N 15 5 7	14 12 5 5 11 14	775 49 499 15 115 11 38 5	1,034 167 602 8 139 29 44 11
E.S. CENTRAL Ky. Tenn. Ala. Miss.	27,870 3,045 8,606 9,590 6,629	32,574 3,132 10,409 10,798 8,235	171 8 59 4 100	414 34 91 10 279	53 11 27 13 2	36 19 10 4 3	20 5 8 7	56 22 25 8 1	47 11 28 5
W.S. CENTRAL Ark. La. Okla. Tex.	45,324 3,853 10,500 4,212 26,759	49,135 3,426 11,972 3,733 30,004	176 4 88 3 81	672 8 413 8 243	2 3	7 3 13	18 1 2 15	81 2 79	86 7 1 72
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	8,690 88 69 77 2,509 877 3,421 119 1,530	9,350 45 77 42 2,854 1,000 3,762 208 1,362	62 1 2 8 20 11 9 3 8	69 5 3 2 13 13 18 1	50 3 1 14 3 19 6 4	41 1 5 14 1 7 12 1	33 1 1 7 7 8 2 7	13 5 1 3 1 1 2	12
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	24,267 2,674 993 19,708 372 520	22,787 2,061 878 19,108 315 425	120 21 12 87	164 29 25 108	62 9 N 49	69 17 N 51	99 10 9 74	106 8 9 87 2 N	100
Guam P.R. V.I.	531 6	49 461	i	3	2	1		Ň	1
Amer. Samoa C.N.M.I.	U 14	Ü	Ü	U	U	U		U	1

N: Not notifiable. U: Unavailable. -: No reported cases.
* incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States,

						Salmon	Salmonellosis ¹				
	Male		Rabies,		NET			ILIS			
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000			
INITED STATES	1,100	1,316	5,866	6,337	32,115	34,970	26,538	29,233			
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	71 4 2 1 31 9	68 6 1 3 31 8 19	659 63 20 58 241 66 212	753 124 21 55 252 52 249	2,162 161 159 72 1,216 122 432	1,991 115 129 103 1,150 124 370	2,037 150 144 63 1,078 164 438	2,028 88 135 99 1,157 137 412			
MID. ATLANTIC Jpstate N.Y. V.Y. City V.J.	311 63 180 34 34	352 71 201 46 34	1,088 715 26 173 174	1,196 757 18 179 242	3,687 1,104 972 652 959	4,548 1,113 1,099 1,057 1,279	3,483 1,213 1,192 657 421	4,811 1,175 1,188 931 1,517			
E.N. CENTRAL Ohio Ind. Ill. Mich. Wis.	129 21 16 33 39 20	132 19 6 62 31	133 42 15 24 46 6	151 50 22 68 11	4,301 1,150 481 1,187 737 746	4,795 1,326 586 1,379 804 700	3,786 1,067 449 1,049 767 454	3,272 1,315 561 189 853 354			
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	32 6 7 12	63 27 2 17 2 1 1 8 6	321 43 74 41 36 42 4 82	495 82 71 50 107 88 2 96	2,097 599 324 594 56 141 128 255	2,172 491 333 651 55 89 204 349	2,193 609 301 878 78 118	2,332 623 321 800 73 96 137 282			
S. ATLANTIC Det. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	266 2 108 13 45 1 17 6 30 44	301 5 105 15 49 4 34 2 26 61	2,044 30 332 441 131 528 105 311 166	2,167 49 382 520 108 522 145 302 139	7,873 87 734 75 1,211 127 1,210 807 1,555 2,067	7,269 107 709 60 915 144 1,010 692 1,347 2,285	5,530 98 815 U 958 128 1,186 677 1,210 458	5,413 120 645 U 857 141 1,039 519 1,596 496			
E.S. CENTRAL Ky. Tenn. Ala. Miss.	33 12 11 6 4	44 18 11 14	190 26 101 61 2	191 19 97 74	2,397 333 582 692 790	2,199 352 586 610 651	1,715 217 738 474 286	1,668 242 752 557 117			
W.S. CENTRAL Ark. La. Okla. Tex.	12 3 5 3	67 3 11 8 45	879 20 3 57 799	831 20 4 52 755	3,402 830 333 432 1,807	4,553 673 819 350 2,711	2,537 92 952 375 1,118	2,785 544 690 275 1,276			
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	51 3 3 20 3 10 4 8	46 1 3 21 9 6 6	230 37 28 20 14 115 15	258 64 9 54 19 93 10	1,937 68 128 53 541 265 551 197 134	2,497 87 110 64 650 215 662 449 250	1,590 4 52 549 215 555 192 23	2,314 104 56 633 195 701 444 181			
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	195 10 13 162 1	243 31 37 165	322 3 282 37	295 7 261 27	4,259 465 216 3,206 39 333	4,956 532 270 3,885 55 214	3,667 491 292 2,526 28 330	4,610 607 330 3,419 33 221			
Guam P.R. V.I. Amer. Samoa C.N.M.I.	4 U	2 5 U	83 U	72 U	510 U	25 620 U	UUUUUUUUU				

N: Not notifiable. U: Unavailable. : No reported cases.
Incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date). Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending November 17, 2001, and November 18, 2000 (46th Week)*

Weeks	enung	Shigel		i, and No	Sypt		(46th Week)*			
	NET		PH	LIS	(Primary & S		Tube	rculosis		
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000		
INITED STATES	15,682	20,121	7,225	11,509	5,161	5,389	10,681	12,514		
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	239 6 6 7 186 17	374 10 6 4 259 30 65	260 2 4 5 177 25 47	354 11 8 239 31 65	56 1 1 2 33 9	76 1 2 54 4 15	364 3 16 4 212 34 95	374 16 18 4 211 28 97		
MID. ATLANTIC Jpstate N.Y. V.Y. City V.J. Pa.	1,138 446 324 185 183	2,421 702 890 483 346	693 113 331 184 65	1,573 209 608 415 341	448 23 246 119 60	250 9 107 62 72	2,007 316 1,010 433 248	2,004 290 1,069 479 166		
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	3,823 2,609 205 463 281 265	3,842 361 1,452 1,095 623 311	1,678 1,111 42 288 210 27	1,162 293 148 108 558 56	917 71 147 303 374 22	1,094 65 322 369 294 44	1,163 232 94 530 234 73	1,265 246 129 604 210 76		
W.N. CENTRAL Minn, Iowa Mo. N. Dak, S. Dak, Nebr. Kans.	1,766 417 351 296 21 543 72 66	2,259 735 499 612 42 7 136 228	1,182 384 290 198 29 246	1,876 823 327 435 49 4 113	78 27 4 20 5	60 15 11 26	403 201 34 121 3 12	458 140 33 171 2 16 22 74		
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	2,237 14 139 53 367 8 313 239 367 737	2,694 22 182 72 425 4 352 128 239 1,270	731 11 87 U 175 8 166 120 130 34	1,065 21 105 U 332 5 246 85 169 102	1,768 9 230 33 96 4 404 206 330 456	1,801 8 273 36 120 3 435 205 353 368	2,234 15 201 51 228 26 307 153 409 844	2,466 14 216 29 236 27 311 238 532 863		
E.S. CENTRAL Ky. Tenn, Ala. Miss.	1,430 651 92 196 491	1,071 460 331 87 193	564 300 104 130 30	533 107 356 63 7	584 43 294 118 129	789 78 474 109 128	717 103 265 239 110	813 109 302 270 132		
W.S. CENTRAL Ark. La. Okla. Tex.	2,050 518 128 78 1,326	3,178 191 263 114 2,610	1,146 155 166 36 789	1,039 57 171 43 768	651 31 154 60 406	741 95 193 108 345	770 136 122 512	1,835 165 176 134 1,360		
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	874 8 39 3 219 113 370 56 66	1,128 7 44 5 242 154 482 75 119	5 246 75 253 53 8	25 3 200 106 320 81 66	214 1 1 36 17 143 8	210 1 1 8 16 178 1 5	433 6 8 3 108 24 199 33 52	458 17 8 4 73 39 190 41 86		
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	2,125 187 80 1,793 6 59	3,154 416 156 2,542 7 33	331 167 102 6 56	3,106 387 104 2,582 3 30	445 42 13 379	368 60 11 296	2,590 210 94 2,113 43 130	2,841 221 88 2,315 98 119		
Guam P.R. V.I.	8	37 33	U	U	240	3 148	76	49 135		
Amer. Samoa C.N.M.I.	7	U	U	U	10	U	U 31	U		

N: Not notifiable.

N: Not notifiable. U: Unavailable. :: No reported cases.

Incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 17, 2001, and November 18, 2000 (46th Week)*

	H. influ			epatitis (Vi		90			_	es (Rubec		
	Inva		A		В		Indiger	Cum.	Impor	Cum.	Total	_
Reporting Area	Cum. 2001 ^s	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	2001	2001	2001	Cum. 2001	Cum. 2000
INITED STATES	1,134	1,143	8,910	11,698	5,770	6,273		49		44	93	75
NEWENGLAND	83	95	571	356	89 5	99 5		4	-	1	5	6
Maine N.H.	2 4	12	11 16	21 18	14	15	U		U			3
Vt. Mass.	3	8 37	16 251	10 126	10	6	-	1 2	-	1	1 3	3
R.I.	5	4	59	23	25	21				-	-	
Conn.	30	33	218	158	31	38	-	1	-	*	1	
MID. ATLANTIC Upstate N.Y.	170 66	211 91	851 242	1,378 230	892 116	1,047		5		11	16	10
N.Y. City	44	58	266	471	383	509		3		1	4	10
N.J. Pa.	40 20	37 25	159 184	260 417	169 224	162 256	U	1	U	5	6	1
E.N. CENTRAL	155	161	1,043	1,512	804	655				10	10	8
Ohio	55	49	204	238	84	96				3	3	2
ind.	46. 20	27 56	93 385	110 645	45 134	108				4 3	4 3	3
Mich,	12	9	295	444	541	369	-					3
Wis.	22	20	66	75		38		7		-		
W.N. CENTRAL Minn,	58 36	65 35	376 40	612 167	189 21	263 34	-	4 2		1	5	2
lowa Mo.	13	20	36 103	62 246	25 103	31 128		2			2	
N. Dak.	7	20	3	3	1	2	U	2	U		2	0
S. Dak. Nebr.	1	1 3	30	30	22	42	U		U			
Kans.	1	4	162	102	16	25	0		-	-		1
S. ATLANTIC	333	250	2,134	1,314	1,340	1,145		4	4	1	5	4
Del. Md.	77	75	262	15 182	129	14 112		2		1	3	-
D.C.			51	24	11	29					-	-
Va. W. Va.	27 14	37 8	119	142 53	158 20	147		1			1	2
N.C. S.C.	44	23	206	129 74	191	219				-		
Ga.	91	62	856	279	442	21 218		1			1	3
Fla.	73	38	552	416	360	371		-	+	-		2
E.S. CENTRAL Ky.	68	46 12	356 118	367 47	379	425 68	-	2 2		4.7	2 2	-
Tenn.	38	20	144	131	208	201		2			- 2	
Ala. Miss.	26	11 2	70 24	48	77 54	56 100	ū	- 5	Ü			
W.S. CENTRAL	44	62	1,180	2,181	628	999				1	7	
Ark.	1	2	62	125	88	90		- 2				
La. Okla.	36	16 42	57 109	85 238	44 85	140	-		-		3	
Tex.	1	2	952	1,733	411	628	-	-		1	1	
MOUNTAIN	127	113	659	828	444	475		1		1	2	12
Mont. Idaho	2	4	11 54	29	11	6	Ü	-	u	1	1	-
Wyo. Colo.	34	1 28	7 81	186	3 99	3 91		-	-	-		
N. Mex.	20	22	37	68	128	124		-				2
Ariz. Utah	54	41	353 64	406 55	132	176 24		1	-		1	3
Nev.	10	5	52	73	42	45	U		U		-	7
PACIFIC	96	141	1,740	3,150	1,005	1,165		29		18	47	22
Wash. Oreg.	5	7 32	139 68	258 157	128	103		13		2	15	3
Calif.	43	36	1,516	2,709	751	932	U	10	U	11	21	15
Alaska Hawaii	6 23	23	14	13 13	17	11	4	2	-	5	7	3
Guam		1		1		10	U		U			
P.R. VI	1	4	119	233	173	259	U		Ü	-	-	2
Amer. Samoa	U	U	U	u	U	U	Ü	U	ŭ	U	U	Ü
C.N.M.I.	-	U		U No see	33	U	-			- 1		U

C.N.M.T.

N. Not notifiable.

U: Unavailable.

No reported cases.

Incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

For imported measles, cases include only those resulting from importation from other countries.

Of 245 cases among children aged <5 years, serotype was reported for 117, and of those, 20 were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 17, 2001, and November 18, 2000 (46th Week)*

			Movel	nber 1	5, 2000	(46th	Week)				
		ococcal ease		Mumps			Pertussis			Rubella	
Reporting Area	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000
INITED STATES	1,918	1,939	3	194	289	49	4,126	6,261		21	165
MEW ENGLAND Maine M.H. Vt. Mass. K.I. Conn.	99 4 13 5 51 4 22	117 8 12 3 67 9	Ü		1 1 2	Ü	374 21 28 30 273 5	1,649 41 117 226 1,201 19 45	Ü		12 2 8 1
AID. ATLANTIC Ipstate N.Y. N.Y. City I.J.	191 56 38 43 54	230 69 39 47 75	Ü	20 3 10 3 4	25 10 6 3 6	2 2	261 129 44 18 70	638 316 81 30 211	Ü	5 1 3 1	9 1 8
E.N. CENTRAL Ohio nd. II. Mich. Wis.	229 69 35 25 58 42	348 83 41 77 105 42	1	19 1 3 11 4	22 7 1 6 6 2	12 9 1 1	589 228 79 68 127 87	726 309 93 107 100 117		3 1 2	1
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	135 20 28 48 6 5 14	137 20 32 62 2 5 7		7 3 - 1 3	17 7 4 1 2 3	5 3 UUU 2	306 146 31 92 4 4 4 25	530 314 52 84 6 7 27 40		3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
S. ATLANTIC Del. Md. D. C. Va. Va. N. Va. N. C. S. C. Ga. Fia.	339 4 38 37 12 62 33 46 107	261 1 26 36 13 36 21 43 83	1	37 7 8 5 5 7 5	9 9 7 10 2 4	6	236 37 1 41 3 69 32 27 26	453 8 111 3 106 1 98 30 38 58		7 1	112 1 82 27
E.S. CENTRAL Ky. Tenn. Ala. Miss.	122 20 56 31 15	127 26 53 34 14	ů	9 3 1	5 1 2 2	ű	131 36 57 36 4	108 55 32 18 3	Ü		6 1 1 4
W.S. CENTRAL Ark. La. Okla. Tex.	313 18 61 27 207	205 12 43 26 124	1	13 1 2	31 3 5	8 1 1 6	437 44 2 20 371	348 35 19 47 247	:	1	8 1 1 6
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	83 4 7 5 31 10 13 7	85 4 7 1 32 9 22 7 3	Ů	11 1 1 1 1 2 1 1 1 3	19 1 1 1 4 6 6	11 11	1,185 36 170 1 253 135 498 75	713 36 59 4 419 85 72 24 15	Ü	1	1
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	407 60 40 292 2	429 51 63 299 8	NU	78 2 N 39 1 36	125 9 N 87 8 21	4 2 U 2	607 142 50 374 10 31	1,096 372 106 558 21 39	Ü	1	13 7 6
Guam P.R. V.I. Amer. Samoa C.N.M.I.	4	9	0000	Ü	16 U	0000	2	4 9 U	0000		1

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

TABLE IV. Deaths in 122 U.S. cities,* week ending

	All Causes, By Age (Years)						P&I			All Cau	ses, By	Age (Y	ears)		P&I
Reporting Area	All Ages	:65	45-64	25-44	1-24	<1	Total	Reporting Area	All Ages	:65	45-64	25-44	1-24	<1	Tota
NEW ENGLAND Boston, Mass. Bridgeport, Conn. Cambridge, Mass. Fall River, Mass. Hartford, Conn. Lowell, Mass. New Bedford, Mass. New Bedford, Mass. New Haven, Conn. Providence, R.I. Somerville, Mass. Springfield, Mass.	35 59 5 56	394 92 33 15 25 U 14 15 18 27 46 3	16	41 12 4 U 2 1 2 1 4	10 4 U	12 4 1	40 13 1 2 U 2 3	S. ATLANTIC Atlanta, Ga. Baltimore, Md. Charlotte, N.C. Jacksonville, Fla. Miami, Fla. Norfolk, Va. Richmond, Va. Savannah, Ga. St. Petersburg, Fl. Tampa, Fla. Washington, D.C. Wilmington, D.C.	178	728 88 89 67 38 73 19 36 36 52 116 55 U	242 34 24 27 28 14 14 15 9 11 40 26 U	113 17 22 4 11 11 2 9 5 7 7	38 4 5 3 6 4 2 1 3 6 4 U	23 1 4 7 2 1 1 1	865 7 177 177 111 9 2 2 6 1
Waterbury, Conn. Worcester, Mass. MID. ATLANTIC Albany, N.Y. Allentown, Pa. Buffalo, N.Y. Camden, N.J. Eiriabeth, N.J. Erie, Pa.§	27 77 2,265 51 28 101 44 13 47	20 56 1,522 34 25 81 25 8 41	17 13 5 6	201	52	30 2 2 1	99 2 1 2 4	E.S. CENTRAL Birmingham, Ala. Chattanooga, Ten Knoxville, Tenn. Lexington, Ky. Memphis, Tenn. Mobile, Ala. Montgomery, Ala Nashville, Tenn.	n. 51 76 61 176 72	542 121 33 50 45 128 55 24 86	157 38 12 16 9 23 8 12 39	61 10 1 8 2 15 8	21 5 2 4 3 1 2 4	23 5 3 2 1 7 5	20
Jersey City, N.J. New York City, N.Y. Newark, N.J. Paterson, N.J. Pritsburgh, Pa. Pritsburgh, Pa. Reading, Pa. Rochester, N.Y. Scranton, Pa. Syracuse, N.Y. Trenton, N.J. Ulica, N.Y. Yonkers, N.Y.	36 1,230 U 16 343 31 33 142 26 53 31 16 U	20 781 U 12 211 26 30 111 20 21 40 24 12	260 U 1 82 4 2 22 5 5 2 9	2 139 U 2 29 1 1 9 1 2 2 2 1	2 30 U 1 14	18 U 7	39 U 1 16 6 10 4 2 9	W.S. CENTRAL Austin, Tex. Baton Rouge, La. Corpus Christi, Te Dallas, Tex. El Paso, Tex. Ft. Worth, Tex. Houston, Tex. Little Rock, Ark. New Orleans, La. San Antonio, Tex Shreveport, La. Tulsa, Okla.	197 88 108 U 77 U	659 53 52 31 118 59 63 U 43 U 111 40 89	220 14 11 15 50 21 32 U 12 U 33 7	71 4 9 1 12 7 7 7 U 6 U 13 7 5	36 2 4 1 8 1 6 0 2 0 6 1 5	19 1 2 2 9 	2
E.N. CENTRAL Akron, Ohio Canton, Ohio Chicago, III. Cincinnati, Ohio Cleveland, Ohio Columbus, Ohio Dayton, Ohio Detroit, Mich. Evansville, Ind. Fort Wayne, Ind.	1.714 43 40 U 96 125 193 126 196 59	1,163 33 32 U 63 79 124 93 106	7 7 1 1 1 1 1 1 2 1 5 0 1 5 0 1 2 4 5 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	98 2 1 U 4 13 11 8 20 2	43 U 6 2 2 1 8	46 1 U 6 5 6	10 12	MOUNTAIN Albuquerque, N.I Boise, Idaho Colo, Springs, Co Denver, Colo Las Vegas, Nev. Ogden, Utah Phoenix, Ariz, Pueblo, Colo, Salt Lake City, Ut Tucson, Ariz,	57 101 227 26 157 27	689 76 44 50 60 162 20 97 23 85 72	175 16 6 13 20 44 3 28 4 23 18	78 11 3 4 9 18 1 21	26 5 3 1 5 2 1 5 4	28 6 1 7 1 1 4 - 7	1 1 1
Gary, Ind. Grand Rapids, Mict Indianapolis, Ind. Lansing, Mich. Milwaukee, Wis. Peoria, III. Rockford, III. South Bend, Ind. Toledo, Ohio Youngstown, Ohio	16 203 41 116 53 73 51 94	127 24 82 44 64 64	2 1 10 54 1 9 2 24 9 10 10 10 10 10 10 10 10 10 10 10 10 10	2 2 9 6 6 6 1 2 6	2 4 5 2 2 1 1 1 2 2	1 3 8 2 3 1 2 1 1	1 4 21 3 11 4 4	PACIFIC Berkeley, Calif. Fresno, Calif. Glendale, Calif. Honolulu, Hawai Long Beach, Calif. Los Angeles, Cali Pasadena, Calif. Portland, Oreg. Sacramento, Cali	f. 322 13 169	1,073 11 49 15 45 44 205 12 115 140	70	96 3 5 3 27 1 10 11	31 2 13 2 2	21	11
W.N. CENTRAL Des Moines, Iowa Duluth, Minn. Kansas City, Kans. Kansas City, Mo. Lincoln, Nebr. Minneapolis, Minn Omaha, Nebr.		56 2: 10: 10:	5 18 1 5 2 6 0 17 5 2	3 2 1 3 1 9	19	1	7 4 1 4 1	San Diego, Calif. San Francisco, Ci San Jose, Calif. Santa Cruz, Calif. Seattle, Wash. Spokane, Wash. Tacoma, Wash.	149 alif. U 141 36 103 55 108	105 U 109 23 79 47 74	29 U 24 7 11 7 21	8 U 4 4 10	3 1 1 1 3	2	
Omaha, Nebr. St. Louis, Mo. St. Paul, Minn. Wichita, Kans.	99 90 81 57	4	5 24	11	8	2	5	TOTAL	10,681	7,235	2,131	798	276	222	71

U: Unavailable. -:No reported cases.

* Mortality data in this table are reported voluntarily from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of it is occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

* Pneumonia and influenza.

* Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

* Total includes unknown ages.

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